

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs                    | Default Operator | Plurals | Time Stamp       |
|-------|------|--|------------------------|------------------|---------|------------------|
| L1    | 280  | ((GMR OR giant magnetoresist\$4) and ((nio OR nickel oxide) WITH (substrate OR base)) and (chromium OR Cr) WITH (underlayer))  | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2010/08/14 16:49 |
| S19   | 615  | ((cobalt OR Co) near3 (underlayer OR under?layer))   | US-PGPUB; USPAT; USOCR | ADJ              | ON      | 2010/03/31 10:21 |
| S21   | 260  | ((nitrogen OR oxygen OR "n.sub.2" OR "o.sub.2") WITH (spacer OR non?magnetic OR copper OR cu) WITH (layer or film) and (under\$8) WITH (chromium OR cr))   | USPAT                  | OR               | OFF     | 2010/08/14 13:29 |
| S22   | 115  | ((nitrogen OR oxygen OR "n.sub.2" OR "o.sub.2") WITH (spacer OR non?magnetic OR copper OR cu) WITH (layer or film) and (underlayer) WITH (chromium OR cr))   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2010/08/14 13:30 |
| S23   | 163  | ((nitrogen OR oxygen OR "n.sub.2" OR "o.sub.2") WITH (spac\$4 OR non?magnetic OR copper OR "cu" OR Ruthenium OR "Ru" OR Iridium OR "Ir" OR Osmium OR "Os") WITH (layer or film) and (underlayer) WITH (chromium OR cr))  | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2010/08/14 13:32 |
| S24   | 3    | ((surfact\$4 OR absorb\$4 OR absorb\$6) WITH (nitrogen OR oxygen OR "n.sub.2" OR "o.sub.2") WITH (spac\$4 OR non?magnetic OR copper OR "cu" OR Ruthenium OR "Ru" OR Iridium OR "Ir" OR Osmium OR "Os") WITH (layer or film) and (underlayer) WITH (chromium OR cr))            | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2010/08/14 13:33 |
| S25   | 6    | ((surfact\$4 OR absorb\$4 OR absorb\$6) WITH (nitrogen OR oxygen OR oxid\$4 OR "n.sub.2" OR "o.sub.2") WITH (spac\$4 OR non?magnetic OR copper OR "cu" OR Ruthenium OR "Ru" OR Iridium OR "Ir" OR Osmium OR "Os") WITH (layer or film) and (underlayer) WITH (chromium OR cr)) | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2010/08/14 13:33 |
| S26   | 505  | ((nitrogen OR oxygen OR oxid\$4 OR "n.sub.2" OR "o.sub.2") WITH (spac\$4 OR non?magnetic OR copper OR "cu" OR Ruthenium OR "Ru" OR Iridium OR "Ir" OR Osmium OR "Os") WITH (layer or film) and (underlayer) WITH (chromium OR cr))   | US-PGPUB; USPAT; USOCR | OR               | OFF     | 2010/08/14 13:34 |

|     |    |   |                        |    |     |                  |
|-----|----|---|------------------------|----|-----|------------------|
| S27 | 10 | (nitrogen OR oxygen OR "n.sub.2" OR "o.sub.2") WITH (spac\$4 OR non?magnetic) SAME (copper OR "cu" OR Ruthenium OR "Ru" OR Iridium OR "Ir" OR Osmium OR "Os") WITH (layer or film) and (underlayer) WITH (chromium OR cr) | US-PGRUB; USPAT; USOCR | OR | OFF | 2010/08/14 13:36 |
| S28 | 9  | (nitrogen OR oxygen OR "n.sub.2" OR "o.sub.2") WITH (spac\$4 OR non?magnetic) WITH (layer OR film) SAME (copper OR "cu" OR Ruthenium OR "Ru" OR Iridium OR "Ir" OR Osmium OR "Os") and (underlayer) WITH (chromium OR cr) | US-PGRUB; USPAT; USOCR | OR | OFF | 2010/08/14 13:36 |
| S29 | 17 | (GMR OR giant magnetoresist\$4) and (nio WITH (substrate OR base)) and (chromium OR Cr) WITH (underlayer)   | US-PGRUB; USPAT; USOCR | OR | OFF | 2010/08/14 13:38 |

8/14/2010 5:11:40 PM

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